ART. IX.—On the Bones of a New Gigantic Marsupial.

By Professor M'Coy.

[Abstract, the original read 30th September, 1861.]

The original paper delivered to the Society has been lost. The paper gave a detailed description of the lower jaw, with the whole of the molar and incisor teeth in place, of a new species of *Diprotodon*, found in sinking a well near Colac, and of some of the bones of the extremities, and of some upper incisors, found at Back Creek, and the distal end of a humerus from Mount Macedon, which the Hon. Dr. Greeves had deposited, on the part of the Mechanics' Institute, in

the Melbourne National Museum.

The new Victorian Diprotodon longiceps (M'Coy) is nearly as large as the great D. Australis of New South Wales; but is distinguished from all known species by the greater length and narrowness of all the teeth, giving a much more slender elongate form to the head. The analogies of the various parts exhibited were demonstrated with corresponding parts of the Native Bear (Phascolarctos), and the Wombat (Phascolomys), between which the animal was shown to stand in structure. It was shown that as the creature, according to the indications of the fossils, was phytivorous, most probably feeding on leaves of trees, and at the same time was at least twelve times the linear dimensions of a Wombat (or as large in the body as a Rhinoceros), it could not climb trees like the Native Bear or Sloth, but probably tore down the forest trees by sheer strength of limb, like the extinct Megatherium of the South American deposits of the same age, and then browsed on the tender twigs and leaves. The gigantic size rendered it impossible for the Diprotodon to burrow like the Wombat.